

THERMAL COMPENSATION FOR HEAD PROTRUSION IN A MAGNETIC DRIVE

ABSTRACT OF THE DISCLOSURE

A head for a magnetic drive that includes a substrate with a
5 thermal expansion rate CTE1. A transducer in the head has a bond to the
substrate and has a transducer thermal expansion rate CTE2 that is greater than
CTE1. A restraint layer in the substrate has a bond to one side of the transducer
and has a first restraint layer thermal expansion rate CTE3 that is lower than
CTE1. The restraint layer restrains protrusion of the transducer beyond the
10 substrate at higher operating temperatures.

094519-0400
FOUO "675450